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EXAMINER

NAHAR, QAMRUN

ART UNIT PAPER NUMBER

2191

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/640,623

Applicant(s)

REES ET AL.

Examiner

Qamrun Nahar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 08/12/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-21 have been examined.

#### ***Specification***

2. The use of the trademarks JAVA, JSP, EJB, JDBC, RMI, and JVM have been noted in this application. They should be capitalized wherever they appear and be accompanied by their generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

3. The disclosure is objected to because of the following informalities: under "RELATED APPLICATIONS" section on pg. 1 of the specification, the application serial numbers for each of the copending applications are missing.

Appropriate correction is required.

4. The disclosure is objected to because of the following informalities: the ending period is missing on pg. 2, line 11 of the specification.

Appropriate correction is required.

#### ***Claim Objections***

5. Claim 8 is objected to because of the following informalities: "servlet a" on line 2 of the claim should be "servlet of a". Appropriate correction is required.

6. Claim 9 is objected to because of the following informalities: “said method of function” on line 1 of the claim should be “said method **or** function”. Appropriate correction is required.

7. Claim 9 is objected to because of the following informalities: there is an extraneous ending period on line 4 of the claim. Appropriate correction is required.

8. Claim 13 is objected to because of the following informalities: “byte code” on line 3 of the claim should be “**bytecode**”. Appropriate correction is required.

9. Claim 13 is objected to because of the following informalities: “and” on line 8 of the claim should be deleted and placed on line 10 of the claim after the phrase “module,”. Appropriate correction is required.

10. Claim 17 is objected to because of the following informalities: a colon is missing after the phrase “comprising” on line 2 of the claim. Appropriate correction is required.

11. Claim 17 is objected to because of the following informalities: “to measures” on line 7 of the claim should be “to measure”. Appropriate correction is required.

12. Claims 18-20 are objected to because of the following informalities: a colon is missing after the phrase “comprising” on line 1 of each of the claim. Appropriate correction is required.

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13. Claim 21 is objected to because of the following informalities: a colon is missing after the phrase "comprising" on line 2 of the claim. Appropriate correction is required.

14. Claim 21 is objected to because of the following informalities: "and" is missing after the phrase "server," on line 7 of the claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

17. Claims 1 and 13 contain the trademark/trade name JAVA on line 2 of claim 1 and on line 1 of claim 13. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the

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trademark/trade name is used to identify/describe software components and, accordingly, the identification/description is indefinite.

Claims 2-12 and 14-16 are rejected for dependency upon rejected base claims 1 and 13, respectively, above.

18. Claims 8 and 9 contain the trademark/trade name JSP on line 1 of claim 8 and line 2 of claim 9. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe JAVA server pages to maintain internet web pages and content and, accordingly, the identification/description is indefinite.

Claim 9 is further rejected for dependency upon rejected base claim 8 above.

19. Claims 8 and 9 contain the trademark/trade name EJB on line 2 of claim 8 and on line 4 of claim 9. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify

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any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a servlet and, accordingly, the identification/description is indefinite.

Claim 9 is further rejected for dependency upon rejected base claim 8 above.

20. Claims 8 and 9 contain the trademark/trade name JDBC on line 2 of claim 8 and line 3 of claim 9. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a driver and, accordingly, the identification/description is indefinite.

Claim 9 is further rejected for dependency upon rejected base claim 8 above.

21. Claim 8 contains the trademark/trade name RMI on line 2 of the claim. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second

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paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe electronic components and, accordingly, the identification/description is indefinite.

Claim 9 is rejected for dependency upon rejected base claim 8 above.

22. Claims 10 and 14 contain the trademark/trade name JVM on line 4 of claim 10 and on line 3 of claim 14. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe execution environment and, accordingly, the identification/description is indefinite.

23. Claim 17 recites the limitation "a response time" on line 7 of the claim, which renders the claim indefinite because it is unclear whether this limitation is referring to the response time on



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line 1 of claim 17 or whether this limitation is referring to another response time. Therefore, this limitation is interpreted as "the response time".

Claims 18-20 are rejected for dependency upon rejected base claim 17 above.

24. Claim 21 recites the limitation "a web server" on lines 3-4 of the claim, which renders the claim indefinite because it is unclear whether this limitation is referring to the web server on line 2 of claim 21 or whether this limitation is referring to another web server. Therefore, this limitation is interpreted as "said web server".

25. Claim 21 recites the limitation "the browser" in line 5 of the claim. There is insufficient antecedent basis for this limitation in the claim. Therefore, this limitation is interpreted as "the web browser".

26. Claim 21 recites the limitation "said browser" in lines 6-7 of the claim. There is insufficient antecedent basis for this limitation in the claim. Therefore, this limitation is interpreted as "said web browser".

27. Claim 21 recites the limitation "said server" in line 8 of the claim. There is insufficient antecedent basis for this limitation in the claim. Therefore, this limitation is interpreted as "said web server".

***Claim Rejections - 35 USC § 101***

28. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

29. Claims 13-16 and 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

30. Claim 13 appears to be a system of software alone, lacking the necessary physical components (hardware) to constitute a machine or a manufacture under 101. Since claim 13 is clearly not a process or a composition of matter, it appears to fail to fall within a statutory category and thus non-statutory.

Claims 14-16 are rejected for failing to cure the deficiencies of the above rejected non-statutory claim 13.

31. Claim 13 does not appear to produce a concrete, tangible and useful result from the steps recited. The step of determining the response time of a method or function is not recited in claim 13; however, claim 16 does appear to produce a concrete, tangible and useful result.

Claims 14-15 are rejected for failing to cure the deficiencies of the above rejected non-statutory claim 13.

32. Claim 21 does not appear to produce a concrete, tangible and useful result from the steps recited. The step of determining the response time associated with a request transmitted from a web browser to a web server is not recited in claim 21.

***Claim Rejections - 35 USC § 102***

33. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

34. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Oulu (U.S. 6,792,460).

**Per Claim 1 (as best understood):**

The Oulu patent discloses:

**- inserting an instrumentation code in a bytecode representation of said method or function to effect generation of a start time marker upon start of execution of said method or function** (“The probe 122 preferably instruments (adds hooks to) a monitored class by instrumenting some or all of the methods 124 within that class. As described below, a particular method is instrumented by adding a “start” call at the beginning of the method ...” in column 11, lines 52-57) **and a stop time marker upon completion of execution of said method or function** (“...and an “end” call at the end of the method.” in column 11, lines 52-57)

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- and utilizing said start and stop time markers to determine a response time of said method or function (“These calls or “hooks” allow the probe to determine whether a particular invocation of an instrumented method corresponds to a transaction that is colored for monitoring, and if it is, to record the start and stop time of that method. The start and stop times of some or all of the methods invoked by this transaction can thus be recorded. These measurements can then be aggregated at the component level to determine the amount of time spend by each component.” in column 11, lines 57-65).

**Per Claim 2 (as best understood):**

The Oulu patent discloses:

- wherein said inserted instrumentation code generate calls to an Application Response Measurement (ARM) agent to cause the agent to provide said start and said stop time markers (“ ... probe ...” in column 11, lines 52-57).

**Per Claim 3 (as best understood):**

The Oulu patent discloses:

- registering said method or function with said ARM agent prior to generation of said start and stop time markers (“... configuration file ...” in column 5, lines 61-64 and column 6, lines 50-54).

**Per Claim 4 (as best understood):**

The Oulu patent discloses:

- wherein said instrumentation code causes generation of said start and stop time markers without modifying instructions associated with execution of said method or function (column 13, lines 34-39).

**Per Claim 5 (as best understood):**

The Oulu patent discloses:

- wherein said ARM agent generates a record corresponding to said method or function for storing the response time associated with said method or function (“... database ...” in column 6, lines 5-33).

**Per Claim 6 (as best understood):**

The Oulu patent discloses:

- wherein said record includes a field for identifying a parent, if any, of said method or function in a hierarchical parent-child transaction chain (column 9, line 65 to column 10, line 25).

**Per Claim 7 (as best understood):**

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The Oulu patent discloses:

- wherein said record includes another field for identifying a top level transaction in said parent-child transaction chain (column 9, line 65 to column 10, line 25).

**Per Claim 8 (as best understood):**

The Oulu patent discloses:

- wherein said software component can be any of a JSP, a servlet of a EJB, a JDBC driver, a JNDI or an RMI component (“... servlet ...” in column 1, line 54).

**Per Claim 9 (as best understood):**

The Oulu patent discloses:

- wherein said method or function of the software component comprises any of a jspService method of a JSP, a doFilter, a doGet, a doPost or a service method of a servlet, a getConnection, executeQuery, or selected methods of JDBC driver, or remote, local or home interface methods of an EJB (“... servlet ...” in column 1, lines 53-67).

**Per Claim 10 (as best understood):**

The Oulu patent discloses:

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- wherein the step of inserting the instrumentation code comprises incorporating instrumentation hooks into said bytecode representation prior to or during loading and initialization of a class containing said method or function by a Java Virtual Machine (JVM) (“... component load time ...” in column 1, line 43-44 and column 13, lines 16-27).

**Per Claim 11 (as best understood):**

The Oulu patent discloses:

- storing said response time in a database (“... reports server ...” in column 1, lines 48-52).

**Per Claim 12 (as best understood):**

The Oulu patent discloses:

- displaying said response time to a user (column 1, lines 64-67).

**Per Claim 13 (as best understood):**

The Oulu patent discloses:

- an instrumentation engine for inserting instrumentation code in a bytecode representation of said method or function, said instrumentation code effecting generation of a start time marker (“The probe 122 preferably instruments (adds hooks to) a monitored class by instrumenting some or all of the methods 124 within that class. As described below, a

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particular method is instrumented by adding a “start” call at the beginning of the method ...” in column 11, lines 52-57) **and a stop time marker upon resumption and completion, respectively, of said method or function** (“...and an “end” call at the end of the method.” in column 11, lines 52-57)

- **an interface module being invoked by said instrumentation code upon start and completion of said method or function** (“... agent 110 ...” in column 5, line 61 to column 6, line 1; and column 6, lines 10-16)

- **an application response measurement (ARM) agent in communication with said interface module, and wherein said interface module, upon invocation by said instrumentation code, calls said ARM agent to cause generation of said start and stop time markers by said ARM agent** (“... agent 110 ...” in column 5, line 61 to column 6, line 1; and “... probe ...” in column 11, lines 52-57).

**Per Claim 14 (as best understood):**

The Oulu patent discloses:

- **wherein said instrumentation engine inserts said instrumentation code prior to loading of a class containing said method or function by a Java Virtual Machine (JVM)** (“... component load time ...” in column 1, line 43-44 and column 13, lines 16-27).



**Per Claim 15 (as best understood):**

The Oulu patent discloses:

- wherein said instrumentation engine inserts said instrumentation code in said bytecode representation without modifying instructions associated with execution of said method or function (column 13, lines 34-39).

**Per Claim 16 (as best understood):**

The Oulu patent discloses:

- an analysis and presentation module in communication with said ARM agent for presenting said response time to a user and/or storing said response time in a database (column 6, lines 39-49).

**Per Claim 17 (as best understood):**

The Oulu patent discloses:

- utilizing a call back provided by the web server to save a start time marker upon start of said transaction ("The probe 122 preferably instruments (adds hooks to) a monitored class by instrumenting some or all of the methods 124 within that class. As described below, a particular method is instrumented by adding a "start" call at the beginning of the method ..." in column 11, lines 52-57)

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- **utilizing another call back from the web server to save a stop time marker upon completion of said transaction** (“...and an “end” call at the end of the method.” in column 11, lines 52-57)

- **and utilizing said start and stop time markers to measure the response time associated with said transaction** (“These calls or “hooks” allow the probe to determine whether a particular invocation of an instrumented method corresponds to a transaction that is colored for monitoring, and if it is, to record the start and stop time of that method. The start and stop times of some or all of the methods invoked by this transaction can thus be recorded. These measurements can then be aggregated at the component level to determine the amount of time spend by each component.” in column 11, lines 57-65).

**Per Claim 18 (as best understood):**

The Oulu patent discloses:

- **deploying a monitoring agent on said web server for receiving said call backs and generating said start and stop time markers** (“ ... probe ...” in column 5, lines 36-46 and column 11, lines 52-57).

**Per Claim 19 (as best understood):**

The Oulu patent discloses:

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- **registering said monitoring agent with said web server to receive said call backs (“ ... probe ...” in column 5, lines 36-46).**

**Per Claim 20 (as best understood):**

The Oulu patent discloses:

- **transmitting said response time to a presentation module for presentation to a user**  
**(column 6, lines 39-49).**

**Per Claim 21 (as best understood):**

The Oulu patent discloses:

- **deploying a script entity on said web browser (“ ... probe ...” in column 5, lines 36-46 and column 11, lines 52-57)**

- **said script entity registering with said web server to receive one or more call backs therefrom at selected points during a transaction initiated by said web server in response to the request from the web browser (“ ... probe ...” in column 5, lines 36-46)**

- **utilizing said script entity to start a clock upon transmission of said request from said web browser to said web server, and utilizing said script entity to stop the clock upon receipt of**

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a call back from said web server indicating completion of said transaction ("The probe 122 preferably instruments (adds hooks to) a monitored class by instrumenting some or all of the methods 124 within that class. As described below, a particular method is instrumented by adding a "start" call at the beginning of the method and an "end" call at the end of the method." in column 11, lines 52-57).

### *Conclusion*

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Klein (U.S. 5,991,705) teaches a method of measuring response time for computer programs using starting and ending queues.

Angel (U.S. 6,314,558) teaches a method of bytecode instrumentation.

36. Any inquiry concerning this communication from the examiner should be directed to Qamrun Nahar whose telephone number is (571) 272-3730. The examiner can normally be reached on Mondays through Fridays from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y Zhen, can be reached on (571) 272-3708. The fax phone number for the organization where this application or processing is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Qamrun Nahar", with a stylized flourish at the end.

Qamrun Nahar  
January 5, 2007